

PROJECT: 23-1022 REST, COPPEI CREEK PROJECT AREA 07 RESTORATION

Sponsor: Walla Walla Co Cons Dist Program: Salmon State Projects Status: Application Submitted

Parties to the Agreement

Address	Walla Walla County C 325 North 13th Ave St		ation Dis	strict		
City	Walla Walla	State	WA	Zip	99362	
Org Type	District-Conservation					
Vendor #	SWV0041502-00					
UBI						
Date Org created						
Org Notes						link to Organization profile Org data updated

SECONDARY SPONSORS

No records to display

MANAGING AGENCY

PRIMARY SPONSOR

Recreation and Conservation Office

LEAD ENTITY

Snake River Salmon Rec Bd LE

QUESTIONS

#1: List project partners and their role and contribution to the project.

The WWCCD is the project lead and will obtain match funds/select a qualified contractor to restore 1.61 river miles of Coppei Creek for Mid-Columbia summer steelhead. Local landowners have been consulted on the design and will be continue to be consulted for restoration.

External Systems

SPONSOR ASSIGNED INFO

Sponsor-Assigned Project Number

Sponsor-Assigned Regions

EXTERNAL SYSTEM REFERENCE

Source	Project Number	Submitter
HWS	23-1022	AFitzgerald

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Project Contacts

Contact Name Primary Org	Project Role	Work Phone	Work Email
Kendall Barrameda Rec. and Conserv. Office	Project Manager	(360) 764-9086	Kendall.Barrameda@rco.wa.gov
Renee M. Hadley Walla Walla Co Cons Dist	Project Contact	(509) 956-3756	renee.hadley@wwccd.net
<u>Grant Traynor</u> Walla Walla Co Cons Dist	Alt Project Contact	(509) 956-3767	grant.traynor@wwccd.net
<u>Ali Fitzgerald</u> Snake River Salmon Rec Bd LE	Lead Entity Contact	(509) 382-4115	ali@snakeriverboard.org

Worksites & Properties

Worksite Name

#1 TR-C7

Restoration	Property Name
✓	Carpenter
✓	Blair
✓	Eaton Sisters
✓	Keisor
√	Smith

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Worksite Map & Description

Worksite #1: TR-C7

WORKSITE ADDRESS

Street Address 2428 COPPEI RD

City, State, Zip Waitsburg WA 99361

Worksite Details

Worksite #1: TR-C7

SITE ACCESS DIRECTIONS

From the City of Walla Walla head eastbound on Highway 12. Continue 18 miles. Turn Right onto Mccown Rd. Take first Right onto Coppei Rd and continue approx. 1 miles. Site is located on he west side of Coppei Road and extends 1.5 miles south the the confluence of the North and South forks of Coppei Creek.

TARGETED ESU SPECIES

Species by ESU	Egg Present	Juvenile Present	Adult Present	Population Trend
Steelhead-Middle Columbia River, Touchet River, Threatened	✓	✓	✓	Stable

Reference or source used

Snake River Salmon Recovery Board (SRSRB). 2011. Technical Document SE Washington Recovery Plan. Prepared for the Washington Governor's Salmon Recovery Office. Walla Walla County. 2004. Technical Document Walla Walla Subbasin Plan. Prepared for NW Power and Cons. Council. AnchorQEA. 2020. Technical Document Upper Touchet Basin Habitat Restoration: Geomorphic Assessment and Restoration Prioritization (Touchet River Geomorphic Assessment). Prepared for Columbia County Conservation District.

TARGETED NON-ESU SPECIES

Species by Non-ESU Notes Rainbow

Bull Trout Identified in Walla Walla Subbasin Plan

Questions

#1: Give street address or road name and mile post for this worksite if available.

S. Fork Coppei Rd, Waitsburg, WA 99361

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Project Location

RELATED PROJECTS

Projects in PRISM

PRISM Number	Project Name	Program Name	Current Status	Relationship Type	Notes
21-1016 P	Coppei Creek Project Area 07 Design	Salmon State Projects	Active	Current Phase	
08-2039 P	Coppei Creek Assessment & Design	Salmon Federal Projects	Closed Completed	Earlier Phase	
17-1301 P	Touchet R Conceptual Restoration Plan	Salmon State Projects	Closed Completed	Earlier Phase	

Related Project Notes

Questions

#1: Project location. Describe the geographic location, water bodies, and the location of the project in the watershed, i.e. nearshore, tributary, main-stem, off-channel, etc.

The project is located on Coppei Creek, which is a tributary to the Touchet River, from river mile 6.5 to 8.11 (approx. 46°11'57.32"N, 118° 6'51.61"W) in the Walla Walla Watershed (WRIA 32), Walla Walla County, Washington.

#2: How does this project fit within your regional recovery plan and/or local lead entity's strategy to restore or protect salmonid habitat? Cite section and page number.

According to the Snake River Salmon Recovery Plan for SE Washington (Chapter 5, pg. 158) "Reduced stream channel complexity, confinement and floodplain function caused by past channel straightening, incision, loss of historic riparian forests and loss of large wood debris source has reduced key habitats such as rearing and wintering habitat." The proposed restoration will align with the goals and objectives of the Snake River Salmon Recovery Plan for SE Washington (SRSRB 2011), by addressing limiting factors for ESA-listed Mid-Columbia Steelhead, bull trout and reintroduced spring Chinook salmon. This project will address the six goals and restoration objectives for basin restoration including; improved floodplain connectivity, development of a high functioning riparian corridor, increase channel complexity at low winter flows and during spring and winter peaks, increase quantity of pools, and increase temporary storage of in-channel bedload sediments.

#3: Is this project part of a larger overall project?

Yes

#3a: How does this project fit into the sequencing of the larger project?

This project was identified as a Tier 1 (high priority) Project Area in the Upper Coppei Creek Reach with a Basin Rank of 10 as designated by the Touchet River Geomorphic Assessment (Appendix I, pg I-40, CCD, 2020). This reach is within the Upper Touchet Basin Major Spawning Area and is within a Priority Restoration Reach as defined by the SE Recovery Plan (SRSRB 2011) and Walla Walla Subbasin Plan (NW Power Council, 2004)

#4: Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. Aquatic Districts and Managers

No

Property Details

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Property: Carpenter (Worksite #1: TR-C7)

LANDOWNER **CONTROL & TENURE Neil Carpenter** Name Instrument Type Landowner Agreement Address 2428 Coppei Rd Timing Proposed City Waitsburg Fixed # of years Term Length State WA Zip 99361 # Yrs Type Private **Expiration Date** 01/01/2033 Note Property: Blair (Worksite #1: TR-C7) √ Restoration **LANDOWNER CONTROL & TENURE** Kevin and Cinda (Cindy) Blair Name Instrument Type Landowner Agreement Address 2248 Coppei Rd Timing Proposed City Waitsburg Term Length Fixed # of years State WA Zip 99361 #Yrs 10 Type Private 01/01/2023 **Expiration Date** Note Property: Eaton Sisters (Worksite #1: TR-C7) √ Restoration **LANDOWNER CONTROL & TENURE** Name Ruth and Gladys Eaton Instrument Type Landowner Agreement

Name Ruth and Gladys Eaton
Address 1962 Coppei Rd
City Waitsburg
State WA Zip 99361
Type Private

Timing Proposed
Term Length Fixed # of years
Yrs 10
Expiration Date 01/01/2023
Note

Property: Keisor (Worksite #1: TR-C7)

√ Restoration

√ Restoration

LANDOWNER

Name Jean Thomas Keisor
Address 1436 Coppei Rd
City Waitsburg
State WA Zip 99361

Type Private

CONTROL & TENURE

Instrument Type Landowner Agreement
Timing Proposed
Term Length Fixed # of years
Yrs 10
Expiration Date 01/01/2023

Note	
NOLE	

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Property: Smith (Worksite #1: TR-C7)

√ Restoration

LANDOWNER

Name Glen and Adelle Smith
Address 1436 Coppei Rd
City Waitsburg
State WA Zip 99361

Type Private

CONTROL & TENURE

Instrument Type Landowner Agreement

Timing Proposed
Term Length Fixed # of years

Yrs 10

Expiration Date 01/01/202

Note

01/01/2023			

Project Proposal

Project Description

Walla Walla County Conservation District will use this grant to advance the preliminary design to a final design and then implement (construct)the restoration design. The project reach is located in Walla Walla County, south of Waitsburg adjacent to Coppei Rd. The project will conserve important salmonid habitat and biological diversity in Coppei Creek by protecting and restoring ecological functions on private parcels. The primary habitat to be protected is riparian and instream habitat.

Large woody debris, levee setback, pilot channel excavation, and grade control structures will restore about 8,500 Linear Feet of instream habitat. We will also restore about 4.55 acres of riparian area. Primary species supported by these habitats are ESA listed anadromous fish, especially Mid-Columbia Summer Steelhead. Habitat restoration more generally will likely benefit salmonids using the Touchet River, including Spring Chinook and Bull Trout. The project reach is designated a Major Spawning Area (98, SRSRB 2011) for Mid-Columbia Summer Steelhead and Priority Restoration Reach (15, SRSRB 2018). The Touchet River Geomorphic Assessment defines this reach as a Tier 1 Project Area for stream restoration to benefit salmonids in the county (Figure 9-2, CCD 2020).

This restoration, once complete, will improve instream, off-channel, and riparian habitat for all life stages of Mid-Columbia Summer Steelhead, benefiting spawning, rearing, and holding salmonids.

Project Questions

#1: Problem statement. What are the problems your project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.

Current and historic land use at the project site is primarily agricultural. Historical actions, like removing trees and restricting the floodplain to protect fields/infrastructure, as well as present-day conditions, have led to the problems we will address in this project:

Horizontal and Vertical confinement of the Channel Horizontal: A bridge and levee (levee on river right facing downstream) is present near the confluence of the N/S fork of Coppei Creek. There are 2 more levees present about 0.25 miles downstream on river right. The first 0.25 miles of the project reach are constrained horizontally with steep hillslope on river left and a high floodplain on river right. Finally, the creek on the downstream-most portion of the project is constrained by steep hillslopes on river left and a bridge grade for an old railroad line. Vertical: Both the upstream and downstream ends of the project show shallow bedrock, constraining the creek vertically in these areas.

Riparian Habitat

There are large portions of the project with established riparian habitat, but there's a section of the creek without cover due to invasive blackberry and reed canary grass encroachment (about 4.55 acres).

Habitat Complexity

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The main channel lacks large woody debris and deeper pools. Many side-channels/historical channels are disconnected, leading to higher flows in the main channel.

Impacts to Salmonids

Increased Flows

Peak discharges for Coppei Creek can occur at 2 different times based on elevation change: The first peak is a rain and/or snow event occurring during the winter months, while the second is due to snowmelt and typically happens late spring/early summer. The confined channel and restricted floodplain have increased erosion and deposition, blocking off side-channels during low flows and increasing flow in the main channel. Higher flows in the winter in the main channel make it more difficult for Adult Mid-Columbia Summer Steelhead to hold in Coppei Creek and wait to spawn in the spring. They also make it more difficult for juveniles that spawned the previous spring/summer to remain in Coppei Creek. Increased flows in the late spring hinder Adult Summer Steelhead from returning to their spawning grounds.

Shade/Cover

Lack of riparian habitat around the divergence of the main channel from the expired CREP impacts all life stages of Mid-Columbia Summer Steelhead. Canopy cover is important to reduce predation and water temperature over the summer during low flows.

Spawning, Foraging, and Refuges

Lack of woody debris, deep pools, and off-channel habitat have important impacts for all life stages of Mid-Columbia Summer Steelhead. Large woody debris offer cover and foraging opportunities for adults and juveniles, as well as rest in the main channel during high flows. Tailout gravels typically formed at the end of deep pools are crucial spawning areas for adults and habitat for eggs in the spring/early summer. Off-channel habitat serves as peak flow refuge for adults and juveniles in the winter/spring, and it also offers shaded foraging areas for these life stages.

Coppei Creek itself is crucial salmonid habitat in the region. Although Coppei Creek is a smaller tributary to the Touchet River, it has great potential to provide habitat for endangered salmonids. There is not much data on presence of reintroduced Spring Chinook or Bull Trout, but the Touchet Geomorphic Assessment notes their main distribution in the region is on the Touchet River upstream of Dayton (pg 32, CCD 2020). Both of these species migrate to spawning grounds in the headwaters of the Touchet River in late spring/early summer. Temperatures downstream of Dayton on the Touchet River can be marginal or lethal for salmonids in the summer, and Coppei Creek could provide refuge for adults migrating up the Touchet River.

#2: Describe the limiting factors, and/or ecological concerns, and limiting life stages (by fish species) that your project expects to address.

Coppei Creek limiting factors, according to the Touchet River Geomorphic Assessment (pg 34, CCD 2020), include high temperatures, sedimentation, inadequate summer flow, restricted floodplain access, low large woody debris (LWD) counts and lack of habitat diversity. Sedimentation impacts are believed to be high or extreme in many areas of the Touchet River Basin. These limiting factors affect every life stage of summer steelhead from egg to adult "but the impacts on spawners, fry, and parr are greater than for other life stages" (pg. 157, SRSRB 2011). Restoration activities designed for Summer Steelhead will benefit other native aquatic species that may be present such as Bull Trout, reintroduced Chinook salmon, lamprey species, sculpin and macroinvertebrate communities.

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#3: What are the project goals? The goal of the project should be to solve identified problems by addressing the root causes. Then clearly state the desired future condition. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized. **Example Goals and Objectives**

The goal of the project is to advance the preliminary design to a final engineered design and construct restoration components as identified in the final design. Specifically, installing bioengineered structures and other restoration techniques to restore and improve channel complexity, riparian habitat and floodplain connectivity from river mile 6.5 to 8.11 of Coppei Creek. This design seeks to:

- 1. Increase the amount of fully functioning riparian habitat on Coppei Creek to support local Mid-Columbia Summer Steelhead recovery goals to reduce impacts of elevated summer water temperatures and predation
- 2. Reduce impacts of increased instream flows on Mid-Columbia Summer Steelhead juveniles and adults during the winter and spring by spreading out water across the floodplain during 2-year flows
- 3. Increase instream habitat complexity at varying flows to benefit all life stages of Mid-Columbia Summer Steelhead
- #4: What are the project objectives? Objectives support and refine biological goals, breaking them down into smaller steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound). Example Goals and Objectives

The objective of this project is to provide a construction-ready design and implement it within 3 years of funding that achieves restoration goals. Based upon our understanding of the project reach we anticipate the final design and construction to incorporate these specific objectives:

- 1. Plant approximately 4.55 acres of riparian habitat with native vegetation to increase shade on the lower portion of the main channel within 3 years of funding
- 2. Make the existing 5-year inundation extents equal to those of the 2-year at proposed conditions by distributing streamflow and energy onto the floodplain to increase off-stream habitat and reduce main channel velocity (to be completed within 3 years of funding)
- 3. Increase large woody debris to aid in hydraulic diversity and meet habitat objectives of one or more pieces per channel width (to be completed within 3 years of funding)
- 4. Increase pool frequency to 1 pool per 7 channel widths (within 3 years of funding)
- Collaborate and coordinate with local landowners, biologists, and technical organizations to implement stream restoration while protecting existing structures from flooding
- #5: Scope of work and deliverables. Provide a detailed description of each project task/element. With each task/element, identify who will be responsible for each, what the deliverables will be, and the schedule for completion.

Walla Walla County Conservation District

Permits and Cultural Resources: In progress as of Feb. 2, 2023, to be completed once we receive Preliminary design before Feb 28, 2023.

The WWCCD will be responsible for outreach and procurement of landowner agreements prior to construction, as well as selecting appropriate engineer and contractors to complete design/construction.

Engineer Team Selected: Early 2024

Contractor Team Selected: Winter/Spring 2025

Riparian plantings to be managed by WWCCD staff post-construction in either 2025 or 2026.

Engineers

Final Design Completion: End of 2024

Engineers/Contractor Construction ends: Fall 2026

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#6: What are the assumptions and physical constraints that could impact whether you achieve your objectives?

Assumptions and constrains are external conditions that are not under the direct control of the project, but directly impact the outcome of the project. These may include ecological and geomorphic factors, land use constraints, public acceptance of the project, delays, or other factors. How will you address these issues if they arise?

This area of Coppei Creek is complex given existing agricultural and residential land use in the immediate area and downstream of the project reach. Physical constraints include bedrock at shallow depths within the stream channel and a narrow canyon wall on the left bank. A potential constraint may include landowner objectives to fully restore the active floodplain, given concerns for preserving and protecting existing property from further channel migration and potential flooding. In order to address these concerns, landowners have been included in steps of the design to ensure they understand the intent on restoring natural ecosystem processes and benefitting salmonids. Project emphasis will be on strategically placing bioengineered structures instream to improve sediment storage and create additional habitat. Restrictions and delays due to unforeseen weather conditions or match funding may affect the timing of this project and will be dealt with accordingly.

#7: How have lessons learned from completed projects or monitoring studies informed this project?

Past projects completed by the Walla Walla County Conservation District include the remediation imminent dangers to fish and other aquatic species such as the Hofer Dam Fish Passage Project (WWCCD 2007) and the installment of hundreds of fish screens within Walla Walla County. The WWCCD hires contractors through public bid processes to install engineered designs on mile long reaches throughout the Walla Walla Basin. The Columbia Conservation District contracted with Anchor QEA to complete the "Upper Touchet Basin Habitat Restoration, Geomorphic Assessment and Restoration Prioritization" (Touchet River Geomorphic Assessment) in 2020 which identifies priority locations for habitat restoration (CCD 2020).

#8: Describe the alternatives considered and why the preferred was chosen.

Alternative practices are discussed in the Walla Walla Subbasin Plan (NW Power Council, 2004) and bioengineered large wood structures were determined to be the most suitable alternative for the basin. Beaver Dam Analogs are not strong enough to withstand average yearly flows at the site. Concrete armoring can have detrimental effects the functioning of the floodplain. There were 2 alternatives discussed with engineers, the Conservation District, and landowners in September 2022. The main differences between the alternatives were the amount of levee work proposed and at which point water would enter the old CREP side channel. After discussion with the landowners to address their concerns and questions, elements from each alternative were combined. The current design includes a proposed partial levee setback from Alternative 2 and a side channel inundation of previously established CREP from Alternative 1.

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#9: How were stakeholders consulted in the development of this project? Identify the stakeholders, their concerns or feedback, and how those concerns were addressed.

Landowners, CTUIR, Walla Walla and Columbia County representatives were consulted during the development of the Touchet River Conceptual Plan (2020). Engineers, Conservation District staff, and landowners met in September 2022 to go over conceptual design elements and possible alternatives. Much of this meeting was to discuss how different instream structures and levee work could change flows and flooding along their properties. Representatives from the Snake River Salmon Recovery Board, Confederated Tribes of the Umatilla Indian Reservation, and Washington Department of Fish and Wildlife were sent designs for review and comments at each design step. Comments from partners addressed throughout the design process included asking for more specific language on some benefits of instream structures, concerns about constructing any features that could restrict the floodplain, and making sure to emphasize a processbased approach to the restoration. Comments and feedback will continue to be sought from partners. RCO, and landowners as designs are finalized throughout the project.

#10: Does your project address or accommodate the anticipated effects of climate change? Yes

#10a: How will your project be climate resilient given future conditions?

This project aims to restore natural hydrologic processes and promote flood resilience of Coppei Creek. This will be attained by installing bioengineered structures and grading portions of the floodplain to improve floodplain connectivity and reactivate historical side channels to improve ecosystem functions. This project will provide some future climate resilience to the area by providing shallow aquifer recharge and greater riparian cover to help reduce instream temperatures. However, many complex factors contribute to global climate change which will likely have complex and far-reaching effects on fluvial processes and increase variability in timing and magnitude of flows. Improving ecosystem functions of Coppei Creek will provide more key habitat for Mid-Columbia Summer Steelhead, increase large woody debris counts and build more climate resilience for the future.

#10b: How will your project increase habitat and species adaptability?

Revegetating disturbed areas with native grasses, trees and shrubs may reduce invasive species and sediment from entering waterways while providing long term food, habitat and shade for terrestrial and aquatic species. Planting species that can withstand changing flow timing and duration, temperature changes will ensure the success of the project. Reactivating historical side channels via bioengineered structures and floodplain grading will provide refuge for juvenile anadromous fish and more habitat for rearing and overwintering. Bioengineered structures will also be placed to encourage pool development and recruit large wood. Grade control structures will encourage channel roughness and gravel sorting.

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#11: Describe the sponsor's experience managing this type of project. Describe other projects where the sponsor has successfully used a similar approach.

Dozier Restoration Project (RCO 07-1527) implemented 15 bioengineered structures, treated 2,100 ft of stream bank, seeded 1.2 acres of native grass, planted over 3,200 native upland plants and enhanced 2.9 acres of riparian zone in 2010.

McCaw Reach Fish Habitat Restoration Project construction completed in fall of 2018 and implemented over 20 bioengineered structures and treat approximately 2,100 linear ft of stream along the Touchet River just downstream of Waitsburg, Washington.

The WWCCD has an ongoing weed control and riparian restoration project, Canopy Cover Improvements on the Touchet River (Ecology) to address the infestation of an invasive, introduced shrub, false indigo (Amorpha fruticosa) which is listed as a class B weed by the Washington State Noxious Weed Control Board. Infestations of false indigo were addressed in 2020 and over 5000 native willow cuttings were planted and 5000 more are scheduled to be planted in the fall of 2023.

#12: Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.

No

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Restoration Supplemental

#1: What level of design (per Appendix D) have you completed? Please attach. Preliminary

#1a: What level of design will be produced prior to construction?

#2: Will (or did) a licensed professional engineer design the project?

#3: Does the project include measures to stabilize an eroding stream bank?
No

#4: Is the primary activity of the project invasive species removal? No

#5: Is the primary activity of the project riparian planting?
No

#6: Describe the steps you will take to minimize the introduction of invasive species during construction and restoration. Consider how you will use un-infested materials and clean equipment entering and leaving the project area.

Equipment will be clean and weed free before entering and leaving the project site. Seed used for re-vegetation will be certified weed free. The project manager will be responsible to communicate this information with contractors and partners on this project. Areas that are disturbed during construction and restoration activities will be reseeded with conservation cover such as perennial, native grass to minimize the potential spread of invasive species.

#7: Describe the long-term stewardship and maintenance obligations for the project.

The WWCCD staff will inspect the project annually and after high flow events within the first two years post-construction. Landowner's responsibility will include reviewing site conditions and notifying the WWCCD staff of changes.

Restoration Metrics

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Worksite: TR-C7 (#1)

worksite: IR-C7 (#1)	
Miles of Stream and/or Shoreline Treated or Protected (C.0.b)	Note: Project is about 1.2 rivermiles measured from aerial imagery, plus abou 0.4mi of side channel
Project Identified In a Plan or Watershed Assessment (C.0.c)	Northwest Marine Fisheries Service. 200 Middle Columbia River Steelhead Distir Population Segment ESA Recovery Pla Portland, O
Priority in Recovery Plan	SRSRB SE Area Plan: MSA for M Columbia Summer Steelhead (pg 98) W Subbasin Plan: Priority Restoration Rea (pg ES-5) Touchet River Geomorpi Assessment: Tier 1 Project Area (pg I-4 This project is identified as a top prior and located in a major spawning area Steelhead and a priority restoration rea in the Snake River Salmon Recovery Pl and 3 yr workpla
Type Of Monitoring (C.O.d.1)	Implementation Monitori
Monitoring Location (C.0.d.2)	No monitoring complet
INSTREAM HABITAT PROJECT	
Total Miles Of Instream Habitat Treated (C.4.b)	1.
Channel reconfiguration and connectivity (C.4.c.1)	
Total cost for Channel reconfiguration and connectivity	\$149,1 Note: Structure Materials/Installation/Oversight
Type of change to channel configuration and connectivity (C.4.c.2)	Creation of Instream Poo Creation/Connection to C Channel Habi Levee removal/Alterati
Miles of Stream Treated for channel reconfiguration and connectivity (C.4.c.3)	1.
Miles of Off-Channel Stream Created or Connected (C.4.c.4)	Note: about 2300ft at 1.5yr flow
Acres Of Channel/Off-Channel Connected Or Added (C.4.c.5)	Note: 2.8 acres at 1.5 flow, conservative with design finalization lands on about 2.5 acres
Instream Pools Created/Added (C.4.c.6)	
Channel structure placement (C.4.d.1)	
Total cost for Channel structure placement	\$452,0 Note: Mobilization/Site Prep/Survey/Equipment
Material Used For Channel Structure (C.4.d.2)	Individual Logs (Anchore Individual Log (Unanchore Logs Fastened Togeth (Logja Other Engineered Structur Rocks/Boulders (Fasten Or Anchore
Miles of Stream Treated for channel structure placement (C.4.d.3)	1. Note: structures are in main channel, not side channel, so took 0.4mi off of total 1.5
Pools Created through channel structure placement (C.4.d.5)	Note: 13 large pools and 20 small likely, so conservative 30 pools
Number of structures placed in channel (C.4.d.7)	Note: 29 structures instream estimated, with additional 200 single logs throughout project
RIPARIAN HABITAT PROJECT	
Total Dinarian Miles Stroomhank Trooted (C.E.h. 1)	n

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Project Application Repo	rt - 23-1022
Total ripatian miles screambank Treated (C.S.D.1)	Note: about 1320 ft of unforested stream on riparian planting
Total Riparian Acres Treated (C.5.b.2)	Note: Acre estimate is 4.55 from engineers
Planting (C.5.c.1)	
Total cost for Planting	\$40,9. Note: Total plant removal/materials/labor
Species Of Plants planted in riparian (C.5.c.2)	Native speci
Acres Planted in riparian (C.5.c.3)	4
Miles of streambank planted (C.5.c.4)	0.:
Average Riparian Width	Note: Area to be planted is about 4.55 acres.
	1.35 acres is on west side of creek, 3.2 o east side East side has expired crep adjacent to planting, adding another 5.65 acres adjacent to plantings
	West side acres: 1.35 East side acres: 8.85 acres
	Avg on west side: 650ft stream with 1.35 acres planted = about 90ft avg Avg on east side: 1075ft stream with 8.85 acres adjacent = about 355ft avg
	Total average: 1320ft stream with 44500(sq feet total = about 335 ft buffer avg
Site Potential Tree Height at 200 years (SPTH-200)	mapping tool has no information for proje locati
ARCHITECTURAL & ENGINEERING	
Architectural & Engineering (A&E)	
Total cost for Architectural & Engineering (A&E)	\$92,5
AGENCY INDIRECT COSTS	
Agency Indirect	
Total cost for Agency Indirect	\$7,2

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Overall Project Metrics

COMPLETION DATE

Projected date of completion 11/30/20

Restoration Cost Estimates

Worksite #1: TR-C7

Category Agency Indirect Costs	Work Type Agency Indirect	Estimated Cost \$7,221	Note
Instream Habitat Project	Channel reconfiguration and connectivity (C.4.c.1)	\$149,183	Structure Materials/Installation/Oversight
	Channel structure placement (C.4.d.1)	\$452,029	Mobilization/Site Prep/Survey/Equipment
Riparian Habitat Project	Planting (C.5.c.1)	\$40,927	Total plant removal/materials/labor
	Subtotal:	\$649,360	•
Admin, Architecture, and Engineering		\$92,523	
	Total Estimate For Worksite:	\$741,883	
Summary			
	Total Estimated Costs Without AA&E:	\$649,360	
	Total Estimated AA&E: Total Estimated Restoration Costs:	\$92,523 \$741,883	

Cost Summary

	Estimated Cost	Project %	Admin/AA&E %
Restoration Costs			
Restoration	\$649,360		
Admin, Architecture, and Engineering	\$92,523		14.41 %
SUBTOTAL	\$741,883	100.00 %	
Total Cost Estimate	\$741.883	100.00 %	

Funding Request and Match

FUNDING PROGRAM

Salmon State Projects \$540,942 72.914732 (

SPONSOR MATCH

Other Monetary Funding	Grant - State	
Amount		\$185,014.
Funding Organization		Washington State Conservati Commissi
Grant Program		Natural Resource Investmer Note: Combination of Natural Resource Investments and Salmon Riparian Project
Donated Paid Labor	Sponsor Payroll	

Amount

Funding Organization Walla Walla County Conservation Distr

Match Total: \$200,94127.085268 '
Total Funding Request (Funding + Match): \$741,883100.000000

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Questions

#1: Explain how you determined the cost estimates

Cost-estimates were determined by the engineers contracted to complete the current design "based on 2022 working conditions for southeastern Washington" (pg 19, RioAse 2022).

Cultural Resources

Cultural Resource Areas

Worksite #1: TR-C7
Area: APE

#1: Provide a description of the project actions at this worksite (acquisition, development and/or restoration activities that will occur as a part of this project)

This project is a combined design & restoration construction project. The project will advance the preliminary design to a final design and implement restoration practices identified in the design. The restoration phase of the project will:

- Place woody structures instream and along the bank
- Plant native riparian vegetation
- Construct grade control structures instream at select locations
- Implement a partial setback of several levees
- Grade sections of the floodplain to reestablish floodplain connection

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#2: Describe all ground disturbing activities (length, width and depth of disturbance and equipment utilized) that will take place in the Area of Potential Effect (APE). Include the location of any construction staging or access roads associated with your project that will involve ground disturbance.

> See design documents for more drawings/details. Ground disturbing activities may include excavation of pilot cuts, levee setbacks, installing engineered log jams and large wood debris per the final engineering design. Specific depth, width and length metrics will be specified and determined in the final design.

*Metrics below based on draft preliminary design and may be adjusted as final design is developed:

Minimal grading: adjacent to Coppei Rd on private property to access to Coppei Creek.

Excavation activities

Floodplain grading: ~885 CY material removed to reconnect floodplain/side channel. Instream work for constructed riffles. Excavation on the Carpenter, Blair, Eaton, and Smith/Keisor parcels. Proposed grading depths: about 1-4 ft from surface level.

Levee setback: ~965 CY of material removed on Carpenter and Blair parcels Proposed grading depths: about 2-4ft

Riparian Plantings: About 4.55 acres native vegetation planted. Planting depths will be based on size of plants, with possible use of low disturbance machinery.

Woody Placement

Willow baffles: excavation about 1' below groundwater level Three-log structures: buried about 2.5' deep in bank (note: if scour pool is desired, on-site engineer will determine if instream excavation of ~2' is appropriate or not)

Single-log structures: some placed on surface, others be buried 1'
Whole Tree Structures: Pipping logs driven 7.5'

Whole Tree Structures: Pinning logs driven 7.5'

Bleeder Dam Structures: Avg 2' depth

Small Apex Jam: Depth based on bedrock presence/absence

#3: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

Pit digging for Cultural Resources review (to be completed under the preliminary design scope of work)..

#4: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

The historic land uses in this reach include agricultural activities and bank alteration through removal of riparian vegetation and installation of levees.

#5: Will a federal permit be required to complete the scope of work on the project areas located within this worksite?

#5a: List the agency that will be issuing the permit and the date you anticipate applying for and receiving the permit. Will the federal permit cover ALL proposed ground disturbing activities included in the project?

WWCCD will apply for a federal permit from the United States Army Corp Engineers Nationwide 27 as part of the preliminary design scope of work.

#6: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not

Unknown

#7: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?

No

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- #8: Is the worksite located within an existing park, wildlife refuge, natural area preserve, or other recreation or habitat site?
- #9: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.

No

There are no buildings directly in the worksite (APE), but there are several structures over 45 years old adjacent to restoration actions:

Blair house – over 45 years old Smith/Keisor house/shop - over 45 years old Levees: Unknown age

Rail grade: over 45 years at north end of project

Project Permits

Permits and Reviews Issuing Organization Applied Date Received Date Date Permit #

Nationwide Permit Army Corps of Eng.

Permit Questions

#1: Are you planning on using the federal permit streamlining process? Limit 8 Yes

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6 out of 6 done

√

Attachments

Required Attachments

Applicant Resolution/Authorizations

Cost Estimate

Landowner acknowledgement form

Map: Restoration Worksite

Photo

RCO Fiscal Data Collection Sheet

PHOTOS (JPG, GIF)

Photos (JPG, GIF)





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PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

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Fil Typ		Attachment Type	Title	Person	File Name, Number Associations	Sha
کے	03/16/2023	Cultural Resources: DAHP Response	DAHP_Letter.pdf	GrantT	DAHP_Letter.pdf, 554798	
L	03/16/2023	Design document	Appendix_A_Coppei_Cr_30pct_20230307_lcompressed.pdf	GrantT	Appendix_A_Coppei_Cr_30pct_20230 compressed.pdf, 554796	V
L	03/16/2023	Preliminary design report	Coppei_Creek_PA7_30Pct_Design_BDR_2	GrantT	Coppei_Creek_PA7_30Pct_Design_B 554779	V
Χ	02/02/2023	Cost Estimate	SAL-CostEstimate_C7.xlsx	GrantT	SAL-CostEstimate_C7.xlsx, 550528	V
L	02/01/2023	Design document	Appendix_E_Coppei_Creek_PA7_Commen Response.pdf	GrantT	Appendix_E_Coppei_Creek_PA7_Com Response.pdf, 550391	V
L	02/01/2023	Design document	Appendix_D_Coppei_Creek_PA7_CE.pdf	GrantT	Appendix_D_Coppei_Creek_PA7_CE 550390	V
L	02/01/2023	Design document	Appendix_C_Coppei_Creek_PA7_DE.pdf	GrantT	Appendix_C_Coppei_Creek_PA7_DE (1).pdf, 550389	V
L	02/01/2023	Design document	Appendix_B_Coppei_Creek_PA7_Hydraulic	GrantT	Appendix_B_Coppei_Creek_PA7_Hydr 550388	V
L	02/01/2023	RCO Fiscal Data Collection Sheet	FiscalDataCollectionSheet Jan 23 page 2.pdf	GrantT	FiscalDataCollectionSheet Jan 23 page 2.pdf, 550375	
کے	02/01/2023	RCO Fiscal Data Collection Sheet	FiscalDataCollectionSheet Jan 23 page 1.pdf	GrantT	FiscalDataCollectionSheet Jan 23 page 1.pdf, 550374	
کے	02/01/2023	Map: Restoration Worksite	ParcelMap.pdf	GrantT	ParcelMap.pdf, 550373	V
人	01/26/2023	Map: Restoration Worksite	VicinityMap.pdf	GrantT	VicinityMap.pdf, 549763	V
人	01/23/2023	Landowner acknowledgement form	Blair_signed.pdf	GrantT	Blair_signed.pdf, 549285	
	01/19/2023	Photo	C7_B.jpg.JPG	GrantT	C7_B.jpg.jpg, 548804	V
	01/19/2023	Photo	C7_A.jpg.JPG	GrantT	C7_A.jpg.jpg, 548803	√
<u>J.</u>	01/19/2023	Map: Area of Potential Effect (APE)	Coppei_C7.pdf	GrantT	Coppei_C7.pdf, 548801	√
L	01/19/2023	Map: Restoration Worksite	C-7 Parcel Map.pdf	GrantT	C-7 Parcel Map.pdf, 548798	√
L	01/17/2023	Applicant Resolution/Authorizations	Applicant Resolution.pdf	GrantT	Applicant Resolution.pdf, 548544	V
L	01/17/2023	Landowner acknowledgement form	Smith_signed.pdf	GrantT	Smith_signed.pdf, 548524	
L	01/17/2023	Landowner acknowledgement form	Eaton&Keisor_signed.pdf	GrantT	Eaton&Keisor_signed.pdf, 548523	
L	01/17/2023	Landowner acknowledgement form	Carpenter_signed.pdf	GrantT	Carpenter_signed.pdf, 548522	
کے	01/12/2023	Project Review Comments	Project Review Comments Report, 23- 1022R (01/12/23 08:18:08)	BrentH	Project Review Comments Report - 23- 1022 (01-12-2023_08-18-08).pdf, 547750	V
کے	01/12/2023	Project Application Report	Project Application Report, 23-1022R (01/12/23 08:18:08)	BrentH	Project Application Report - 23-1022 (01- 12-2023_08-18-08).pdf, 547749	V
کے	01/12/2023	Project Review Comments	Project Review Comments Report, 23- 1022C (01/12/23 08:17:30)	BrentH	Project Review Comments Report - 23- 1022 (01-12-2023_08-17-30).pdf, 547748	V
人	01/12/2023	Project Application Report	Project Application Report, 23-1022C (01/12/23 08:17:30)	BrentH	Project Application Report - 23-1022 (01- 12-2023_08-17-30).pdf, 547747	V

Application Status

Preapplication

Application Due Date: 06/27/2023

Status Name	Status Date	Submitted By	Submission Notes
Application Submitted	04/12/2023	Grant Traynor	

01/09/2023

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional documents before evaluation or approval of this project and I agree to provide them. (Grant Traynor, 04/12/2023)

Date of last change: 04/12/2023

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